

Amendments to the specification

At page 3, please amend the first full paragraph, which begins at line 3, as follows:

-- According to another aspect of the invention, when an operator adds or moves a control point outside the restricted area, the restricted area is redefined to accommodate an area about such control point, so that such control point resides within the redefined restricted area. In one embodiment the restricted area is expanded using morphological dilations. In another embodiment the restricted area is expanded to encompass the entire image. In yet another embodiment the restricted area is expanded only in the area between the added/moved control point and the two nearest control points to which it is to connect. --

At page 10, line 24 to page 11, line 2, please amend the paragraph as follows:

-- ~~According to one aspect of the invention, the~~ The object boundary derived for the current image frame is limited to a restricted area, (i.e., the range of pixels within the image which may qualify as boundary points is limited). The restricted area is defined based upon the imported control points. Specifically the restricted area corresponds to a band derived from the boundary, including the imported control points, of the prior frame. Pixel points outside such band are not eligible to be part of the contour defining the object boundary. Points within the band are referred to as 'alive.' Points not within the band are referred to as 'not alive.' Referring to Fig. 5 a display frame 122 includes an object 124. The purpose of the segmentation method is to identify a boundary of such object so that the object can be manipulated, extracted, or tracked. The control points 126 and prior boundary are imported from the prior image frame. An initial object boundary 128 is estimated for the object 124 using the control points 126 and the edge energy image. When deriving such estimated boundary 128 the pixels eligible to be part of the boundary 128 are limited to those within the band 130. This band defines the restricted area. --

At page 11, lines 17-24, please amend the paragraph as follows:

-- Referring again to Fig. 4, if there are no control points identified at step 118, then the band is reset at step 132 to correspond to the entire image frame. If there are control points, at step 118, then the band 130 is derived and displayed at step 134. Various ~~method~~ methods may be used to derive the band ~~134~~ 130. In one embodiment, the imported boundary from the prior frame is used. In another embodiment a polygonal contour is formed by the set of imported control points. The imported boundary or derived polygonal contour is morphologically dilated, (e.g., using a square kernel, although another type of kernel may be used) to form the band 130. --